

REMARKS:

The specification has carefully revised to overcome the points raised by the Examiner concerning the title and drawings and also to provide some explanatory language without adding further matter. Some minor typographical and grammatical errors have been corrected.

The Examiner has rejected the application on the grounds that the specification does not describe the subject matter in such a way as to enable one skilled in the art to manufacture the product to which it pertains.

A statement is attached by an independent person skilled in this field which simply states that the specification is complete and sufficient to enable a person skilled in the art to manufacture the product.

In general terms the arrangement is very simple in that there are a number of co-axial cable each having a conductive jacket with the cables being spliced together using well known techniques. Such cables have of course been available in the marketplace for many years and the splicing of these cables is well known and trivial.

In addition it is well known that such cables can be located by applying to the cable an electrical signal in the form of an oscillating current (generally sinusoidal) at a predetermined frequency. These currents are called "tones" since they are alternating. Again these tones are well known and the source for generating such tones and applying them to the cable is also equally well known.

Examples of these arrangements could be provided to the Examiner using prior art documents, but it is believed that these issues are trivial to a person skilled in this art.

One example of a prior patent is US patent 6,194,889 of one of the present inventors which refers to the same arrangements and discloses the arrangements in similar manner. The Examiner in that patent did not raise any objections concerning the requirement to describe the tone source or the splicing.

The Examiner has specifically pointed to a number of features which are considered to be insufficiently explained. These are set out as follows:

- 1) "Which is the second terminal? The second terminal is the item marked 30 in Figure 3 and this is connected to ground. The connection of terminals to ground is of course trivial.
- 2) "Which is the tone signal return path?" The tone signal return path is conventionally ground so that the source at one end is connected to ground and the second terminal is connected to ground at the other end so that the ground acts in effect as a return path. However this is not essential and a specific conductor can be provided as the return path. Again this is merely trivial and well known to persons skilled in this art.
- 3) "How second terminal is connected to the tone signal return path?" The connection of a terminal to ground is merely trivial and is provided in substantially all electrical and electronic devices.
- 4) "The details of the first and second terminals." Again this is entirely trivial in that terminals of this type are available in substantially all electronic and electrical devices.

- 5) "How the plurality of cables being connect to each other?" This technique has been available for many years since the cable industry has been in widespread use for supplying telecommunication signals.
- 6) "What is the source for the tone source?" This is merely a conventional oscillator generating a sinusoidal signal. The signal is shown at 48 in Figure 2. Devices to generate such an oscillating signal are entirely trivial.
- 7) "How the magnitude load impedance is varied to maintain a constant current through the load impedance?" The claims have been amended so that this expression is no longer used.
- 8) "How resistive termination is provided at the outer end of the cable?" As set forth in the preamble, resistive termination is well known in this industry and requires simply, as shown in the prior art, the connection of a resistor between the jacket or conductor surrounding the cable and ground. This again is merely trivial.
- 9) "How the signal is connected to the signal return path?" Again this is merely the connection of a terminal to ground and again therefore is trivial.
- 10) "How the constant electrical signal current is maintained at the termination?" This is explained in the paragraphs commencing at the top page 9. The operation of an FET is known and provides the constant voltage drop set forth so that the current through the

resistor R1 is limited to the maximum defined. This is a result of the known characteristics of an FET.

11) "How the resistive termination is changed at the end of the cable?"

This expression is no longer used in the claims.

With regard to the claims, Claims 1 through 9 have been cancelled and also Claim 19 has been cancelled. This leaves independent Claims 10 and 20. These claims have been amended so as to more clearly point out the invention and to remove the features set forth by the Examiner which were stated to be unclear.

Claims 21 through 27 have been added including independent Claims 21 and 27.

Claims 21 and 27 have been amended so that they have been simplified relative to the previous claims and specify the invention as is simply set forth in the Abstract. Thus the Abstract as previously filed states that the termination at each branch cable firstly limits the current on each branch to a value or amplitude which is sufficient for cable location. This limiting of the current or maintaining the current below a maximum value ensures that branches furthest from the tone source have adequate current for location purposes. Further, the Abstract states that the terminations is the same for each branch so that the maximum current or the limited current is the same for each branch. These features are straightforward. The claims have been amended to reflect these simple statements of the invention.

The implementation of the system is clearly shown in Figure 3 and this certainly would enable a person skilled in the art to simply adopt the items shown using

suitably selected component values whereupon the circuit will operate as explained in the specification to provide the control of the maximum current as set forth.

It is requested that the Examiner review the application as amended and allow the amended claims.

Respectfully submitted

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Enc.(5)

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